

**PROJECT STATUS MEMORANDUM**

**NO. 09-14**

**TO:** Pamela Tames, USEPA  
**FROM:** Mark M. Goldberg, P.E.  
Tunde H. Komuves-Sandor, CPG

**DATE:** February 3, 2015

**PROJECT:** Rowe Industries Superfund Site  
Groundwater Recovery and Treatment System  
September 2014 Status Report  
Sag Harbor, New York

LBG Engineering Services, P.C. (LBG) commenced operation of the Full-Scale Pump and Treat (FSP&T) groundwater remediation system at the above-referenced site on December 17, 2002. Starting in September 2008, the groundwater recovered by the Focus Pump and Treat (FP&T) system was routed to the FSP&T system for treatment. This status report presents a summary of performance, operation and maintenance for both systems and monitoring activities for the site from September 1, 2014 through September 30, 2014. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

**SUMMARY OF SYSTEM PERFORMANCE AND OPERATION**

*(September 1, 2014 through September 30, 2014)*

- |   |                                      |
|---|--------------------------------------|
| 1. Hours of operation during the reporting period:  | 325 hours (45.1%)                    |
| 2. Alarm conditions during the reporting period:  | See Table 1                          |
| 3. Was the SPDES VOC discharge permit criteria achieved:  | yes, (see Table 2)                   |
| 4. Total volume of water pumped during the reporting period:  | 645,315 gal.*                        |
| 5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd:   | yes, (see Graph 1)                   |
| 6. Mass of VOCs recovered during the reporting period:  | 0.01 pounds*                         |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:<br>(calculations can be provided upon request)  | 227.3 pounds                         |
| 8. Effluent VOC vapor concentration for the reporting period:   | 0.06 mg/m <sup>3</sup> (see Table 3) |
| 9. Was the effluent VOC vapor emission rate below 0.022 lbs/hr.:<br>(calculations can be provided upon request) | yes (0.00059 lbs/hr)                 |

\*Values represent the FSP&T and FP&T system recovery wells.

## PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes recovery well parameters for the operating recovery wells. Table 4 presents a summary of the quality results for water samples collected from all downgradient recovery wells. Graph 2 presents tetrachloroethylene (PCE) concentrations for each downgradient recovery well, graph 3 presents PCE concentrations at an expanded scale in order to compare them to the PCE aquifer restoration concentration of 5 ug/L.

The groundwater quality results for the FRWs are summarized in Tables 5 through 8 and Graphs 4 through 7. Laboratory analytical reports for the RWs and FRWs are included as Appendix II.

Well	Volume pumped (gal)	Total VOC Concentration (µg/L)	VOC Recovery (lbs)
RW-2 <sup>1/</sup>	562,519	1.1	0.01
FRW-1 <sup>2/</sup>	6,032	38.0	< 0.01
FRW-2 <sup>2/</sup>	1,399	37.9	< 0.01
FRW-3 <sup>2/</sup>	5,011	68.1	< 0.01
FRW-4 <sup>2/</sup>	116,661	41.3	0.04

<sup>1/</sup> The above table summarizes the parameters for RW-2 from September 1 through September 30, 2014. The average flow rate for RW-2 during this period was 27 gallons per minute.

<sup>2/</sup> The above table summarizes the parameters for the FRWs from August 21, 2014 through September 30, 2014.

The following recovery wells have been shut down after receiving EPA approval:

- RW-1 was shut down on July 13, 2005;
- RW-3 was shut down on May 21, 2012;
- RW-4 was shut down on January 1, 2014;
- RW-5 was shut down on May 23, 2012;
- RW-6 was shut down on January 1, 2014;
- RW-7 was shut down on January 1, 2014;
- RW-8 was shut down on April 30, 2012; and
- RW-9 was shut down on April 23, 2012.

Operation and maintenance activities for the FSP&T and FP&T systems and associated wells are summarized on Table 1. The uninterruptable power supply (UPS) unit was replaced on September 11, 2014, however, the FSP&T (and FP&T) system(s) could not be restarted until September 17, 2014 because of a grounding issue. The grounding issue was fixed and the FSP&T system restarted on September 17, 2014.

## EVALUATION OF GROUNDWATER QUALITY

During September 2014, groundwater quality sampling was completed for the following wells:

- monthly groundwater samples were collected from RW-2, FRW-1, FRW-2, FRW-3 and FRW-4.
- quarterly samples were collected from monitor wells MW-43A, MW-43B, MW-43C, MW-53 and MW-54; and
- semi-annual samples were collected from recovery wells RW-1, RW-3, RW-5, RW-8, RW-9 and 46 monitor wells;

In September, COC concentrations in the groundwater samples from FRW-1, FRW-2, FRW-3 and FRW-4 were consistent with detected concentrations within the last two years for conditions when the FP&T system is operating. COC concentrations continue to be detected below ARARs in the groundwater samples collected from recovery well RW-2. PCE, TCE, cis-DCE, and/or TCA concentrations continue to be detected below ARARs in the groundwater samples collected from recovery wells RW-2, RW-4 and RW-6. PCE, TCE, cis-DCE, and/or TCA were not detected in the groundwater samples collected from RW-1, RW-3, RW-5, RW-8 and RW-9.

With the exception of the monitor wells located in the Former Drum Storage Area (FDSA), COC concentrations detected in the groundwater samples from the remaining monitor wells were below ARARs. Results of the semi-annual sampling event will be further discussed in the 2014 annual summary report.

RW-2 will continue to operate as a protective measure; being located closest to and directly downgradient from the FDSA. Groundwater samples from RW-2 and the FRWs will continue to be collected and analyzed monthly to monitor quality trends. The water quality at the non-operating recovery wells (RW-1, RW-3, RW-4, RW-5, RW-6, RW-7, RW-8 and RW-9) and monitor wells MW-43A, MW-43B, MW-43C, MW-53 and MW-54 will be monitored according to the approved 2013 Limited Recovery Well Shutdown Plan.

### **FUTURE O&M ACTIVITIES**

Future O&M activities scheduled for 2014 include:

- normal bi-weekly/monthly O&M activities;
- Recharge basin rehabilitation after all leaves fall.

MMG:nv

Attachments

cc: Ken W. Wengert - Kraft Foods Group, Inc. - .pdf  
Lisa Krogman, Environ – .pdf  
Jeff Trad, NYSDEC – .pdf  
Chief-Operation Maintenance and Support Section, NYSDEC – .pdf  
Anthony Leung, RWM, R-1, NYSDEC  
Tiffany Scarloto, Town of Southampton Attorney - .pdf  
Mark Sergott, NYSDOH – .pdf

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